

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-12. Cancelled

13. (Currently Amended) The system of claim 37, wherein the elements of the micro dichroic filter arrays are configured to transmit primary colors.

14. Cancelled

15. (Previously Presented) The system of claim 37, wherein elements of the micro dichroic filter array of the first display panel are configured to transmit either red, green, or blue light.

16. (Previously Presented) The system of claim 15, wherein elements of the micro dichroic filter array of the second display panel are configured to transmit either red, green, and blue light.

17. (Previously Presented) The system of claim 15, wherein elements of the micro dichroic filter array of the second display panel are configured to transmit either cyan, magenta, and yellow light.

18. (Previously Presented) The system of claim 37, wherein the first and second color display panels are located at adjacent surfaces of the polarizing beam splitter assembly.

19. (Previously Presented) The system of claim 37, wherein the first and second color display panels are located at opposite surfaces of the polarizing beam splitter assembly.
20. (Previously Presented) The system of claim 37, wherein the polarizing beam splitter assembly is configured to split an illumination beam into a first input light beam and a second input light beam and direct the first input light beam towards the first display panel and the second input light beam towards the second display panel.
21. (Previously Presented) The system of claim 20, wherein polarizing beam splitter assembly is configured so that the first and second input light beams have mutually orthogonal polarization states.
22. (Previously Presented) The system of claim 21, wherein system is configured so that the first input light beam and the portion of the first light beam reflected from the first display panel have mutually orthogonal polarization states.
23. (Previously Presented) The system of claim 22, wherein the system is configured so that the second input light beam and the portion of the second light beam reflected from the second display panel have mutually orthogonal polarization states.
24. (Previously Presented) The system of claim 37, wherein the polarizing beam splitter assembly comprises a single polarizing beam splitter.
25. (Previously Presented) The system of claim 37, wherein the polarizing beam splitter assembly comprises a plurality of polarizing beam splitters.
26. (Previously Presented) The system of claim 37, wherein the polarizing beam splitter assembly comprises a plurality of prisms arranged as a square.

27. (Previously Presented) The system of claim 26, wherein the prisms are right angle prisms.
- 28 (Previously Presented) The system of claim 27, wherein the right angle prisms have polarizing beam splitter coatings on their right angle surfaces.
29. (Previously Presented) The system of claim 37, wherein the polarizing beam splitter assembly comprises four polarizing beam splitter coatings arranged as a cross.
30. (Previously Presented) The system of claim 37, wherein the polarizing beam splitter assembly comprises four polarizing beam splitter cubes.
31. (Previously Presented) The system of claim 30, wherein the four polarizing beam splitter cubes are arranged as a square.
32. (Previously Presented) The system of claim 31, further comprising half wave plates positioned between the polarizing beam splitter cubes.
33. (Previously Presented) The system of claim 37, further comprising a projection lens configured to amplify the image beam.
34. (Previously Presented) The system of claim 37 further comprising first and second quarter wave plates respectively located between the first and second display panels and the polarizing beam splitter assembly.
35. (Previously Presented) The system of claim 37, wherein during operation the first and second display panels modulate the filtered portions of the first and second light beams reflected

from the display panels so that the first and second light beam portions correspond to different view angles of an image.

36. (Previously Presented) The system of claim 37, wherein during operation the first and second display panels modulate the filtered portions of the first and second light beams reflected from the display panels so that the first and second light beam portions correspond to the same view angle of an image.

37. (Currently Amended) A system comprising:

first and second liquid crystal on silicon (LCoS) display panels each comprising a micro dichroic filter array, ~~wherein elements of each micro dichroic filter array~~ including multiple elements are configured to transmit a portion of an incident light beam, the transmitted portion being a filtered portion where the filtered portion from different elements are different colors, and each element being further configured to reflect a portion of the incident light beam, the reflected portion being an unfiltered portion[[,]] of the light beam, so that the polarization of the unfiltered portion is not changed when leaving the display panel,

wherein each display panel is configured to reflect and modulate filtered portions from the corresponding micro dichroic filter array ~~the filtered portions being reflected within the display panel and at least some of the filtered portions being modulated within the display panel~~ so that the polarization of ~~these~~ at least some of the filtered portions is changed when leaving the display panel, ~~the elements of each micro dichroic filter array being further configured to reflect corresponding unfiltered portions of the light beam so that the polarization of the unfiltered portion is not changed when leaving the display panel;~~ and

a polarizing beam splitter assembly configured so that during operation the polarizing beam splitter assembly combines the filtered portions of a first light beam reflected by the first display panel with filtered portions of a second light beam reflected by the second display panel to form an image beam, and the combined filtered portions of the first and second light beams have mutually orthogonal polarization states.

38. (Currently Amended) A system, comprising:

a polarizing beam splitter assembly including a plurality of polarizing beam splitter coatings arranged in orthogonal planes; and

first and second display panels positioned relative to the polarizing beam splitter assembly so that during operation the polarizing beam splitter assembly combines filtered light reflected from the first and second display panels to form an image beam,

wherein the first and second display panels each comprise a micro dichroic filter array, each micro dichroic filter array comprising multiple elements each configured to transmit a corresponding filtered portion of an incident light beam, the transmitted portion being a filtered portion where the filtered portion from different elements are different colors, and each element being further configured to reflect a portion of the incident light beam, the reflected portion being an unfiltered portion, so that the polarization of the unfiltered portion is not changed when leaving the display panel,

wherein each display panel is configured to reflect and modulate the filtered portion from the corresponding micro dichroic filter array ~~the filtered portions being reflected within the display panel and at least some of the filtered portions being modulated within the display panel~~ so that the polarization of these at least some of the filtered portions are is changed when leaving the display panel, ~~the elements of each micro dichroic filter array being further configured to reflect corresponding unfiltered portions of the light beam so that the polarization of the unfiltered portions is not changed when leaving the display panel.~~

39. (Previously Presented) The system of claim 38, wherein the polarizing beam splitter assembly comprises a plurality of polarizing beam splitter cubes.

40. (Previously Presented) The system of claim 39, further comprising one or more half wave plates positioned between the polarizing beam splitter cubes.

41. (Previously Presented) The system of claim 38, wherein the polarizing beam splitter assembly comprises a plurality of right angle prisms.

42. (Previously Presented) The system of claim 41, wherein the polarizing beam splitter coatings are positioned on right angle surfaces of the right angle prisms.

43. (Currently Amended) A method comprising:

directing a first light beam to reflect from a first color liquid crystal on silicon (LCoS) display panel and a second light beam to reflect from a second color LCoS display panel, the first and second color LCoS display panels each comprising a micro dichroic filter array, each micro dichroic filter array comprising multiple elements each wherein element of each micro dichroic filter array are configured to transmit a corresponding filtered portion of an incident light beam, the transmitted portion being a filtered portion where the filtered portion from different elements are different colors, and each filter being further configured to reflect a portion of the incident light beam, the reflected portion being an unfiltered portion, so that the polarization of the unfiltered portion is not changed when leaving the display panel,

wherein each display panel is configured to reflect and modulate the filtered portion from the corresponding micro dichroic filter array the filtered portions being reflected within the display panel and at least some of the filtered portions being modulated within the display panel so that the polarization of these at least some of the filtered portions are is changed when leaving the display panel, the elements of each micro dichroic filter array being further configured to reflect corresponding unfiltered portions of the light beam so that the polarization of the unfiltered portions is not changed when leaving the display panel; and

combining the filtered portions of the first light beam reflected by the first display panel with the filtered portions of the second light beam reflected by the second display panel to form an image beam,

wherein the combined filtered portions of the first and second light beams have mutually orthogonal polarization states.

44. (Currently Amended) The method of claim 43, wherein the filtered portions of the first and second light beams are modulated with the first and second display panels so that the reflected filtered first and second light beam portions correspond to different view angles of an image.

45. (Currently Amended) The method of claim 44, wherein ~~the~~ each element[[s]] of the micro dichroic filter arrays are selected so that the filtered portions reflected by the first and second display panels ~~reflect~~ are red, green, and or blue light, ~~respectively~~.

46. (Currently Amended) The method of claim 43, wherein the filtered portions of the first and second light beams are modulated with the first and second display panels so that the reflected filtered first and second light beam portions correspond to the same view angle of an image.

47. (Currently Amended) The method of claim 46, wherein elements of the micro dichroic filter array of the first display panel are selected so that the filtered portions from the first display panel ~~are~~ reflect red, green, and or blue light, ~~respectively~~, and elements of the micro dichroic filter array of the second display panel are selected so that the filtered portions from the second display panel ~~are~~ reflect cyan, magenta, and or yellow light, ~~respectively~~.

48. (Currently Amended) The method of claim 43, further comprising splitting an input light beam to form the first and second light beams.

49. (Currently Amended) The method of claim 48, wherein the first and second light beams have mutually orthogonal polarization states.

50. (Previously Presented) The method of claim 43, further comprising amplifying the image beam.

51. (New) The method of claim 43, wherein the unfiltered portions of the first and second light beams are provided to a light recycle system for resubmitting the unfiltered portions to the first and second display panels.

52. (New) The system of claim 37, further comprising a light recycle system for resubmitting the unfiltered portions of the first and second light beams to the first and second display panels.

53. (New) The system of claim 38, further comprising a light recycle system for resubmitting the unfiltered portions of the first and second light beams to the first and second display panels.